



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant of:

Ramesh Keshavaraj

Serial Number:

10/066,738

Filed:

February 4, 2002

For:

**AIRBAG FABRIC POSSESSING  
VERY LOW COVER FACTOR**RECEIVED  
AUG 26 2003  
TC 1700

Group Art Unit: 1771

Examiner: A. Singh

**DECLARATION UNDER 37 C.F.R. § 1.132**

Mail Stop Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Ramesh Keshavaraj, declare the following:

1. I received a Bachelor of Science degree in Chemical Engineering from C.I.T. in India, a Master's degree in Chemical Engineering from The Texas Technological University in Lubbock, Texas, and a Doctorate in Chemical Engineering from The Texas Technological University, in Lubbock, Texas.
2. For the last seven (7) years I have been employed by Milliken & Company headquartered in Spartanburg, South Carolina, with my employment located in LaGrange, Georgia.
3. My experience in the textile industry has been devoted to the research, design and processing of airbag fabrics and airbag cushion products. My current position with Milliken & Company is as a Development Manager.
4. For the last seven (7) years with Milliken & Company, my work has primarily focused on the development of fabrics and cushion products for airbag uses within automobiles.

5. I am familiar with the above-referenced patent application as Applicant as well as United States Patent 6,291,040. It is clear that the claims of the above-referenced application require an airbag fabric exhibiting a minimum air permeability of 0.5 cfm at 124 Pa pressure, while simultaneously exhibiting a maximum cover factor of 1900. I have taken the measurements and designs of one commercially available embodiment of the above-referenced patent's claims, specifically a fabric having a cover factor of 1885, with 420 denier nylon 6,6 yarns, with a count of 46 X 46 threads/inch weave density (Note that higher pick counts, such as 57 X 53 threads/inch, and 55 X 55 threads/inch, result in cover factors in excess of 2100). Such a commercially available fabric believed to have a coating of an anionic ionomer type polyester based urethane resin (from each of the Examples of the '040 patent), in an amount in terms of thickness of about 5 microns. The fabric was then subjected to a standard Air Permeability test, at a 124 Pa test pressure, and exhibited 0.645 cfm as the minimum measurement. Thus, the resultant air permeability at a sufficiently low cover factor level as required by my pending claims is not met by the teachings and implications of the '040 patent. This 0.645 cfm result at 124 Pa is well outside the claimed range for my patent claims.

6. Thus, in my opinion, the '040 patent fails to teach the same airbag fabric as in my currently claimed invention. Hence, in my opinion, such results show the lack of anticipation of my claimed invention in comparison with the '040 patent teachings. Furthermore, since this reference fails to discuss the potential for altering the preferred embodiments to the extent of my claimed invention, nor does this reference discuss any reasons or needs to make such possible modifications, in my opinion, this comparison is also relevant as an indication of the nonobviousness of my invention.

7. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

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Date: 8/18/03